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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,730	11/20/2003	Daniel N. Cripe	200313587-1	8712

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EXAMINER	
SINKANTARAKORN, PAWARIS	
ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
08/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/717,730	CRIPE ET AL.	
	Examiner	Art Unit	
	Pao Sinkantarakorn	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 1 of the remarks, filed 6/28/2007, with respect to the rejection(s) of claim(s) 1, 8, 12, and 16 under 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art.

2. Claims 1-21 are pending.

Claim Rejections - 35 USC § 103

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-4 and 7-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Congdon et al. (US 6,151,297) in view of Siu et al. (newly cited US 7,072,345).

Regarding claim 1, Congdon et al. disclose a computer system comprising:

a central processing unit (CPU) (see column 6 line 15, Network Operating System runs on a CPU);

a first and second network adapter teamed together and configured to receive offloaded connections (see column 8 lines 57-64, when multiple NICs in a server are attached to a network and the NICs are using the same MAC address, it is possible to receive packets on many ports) ; and

wherein a program executing on the CPU reloads an offloaded connection established by the first network adapter onto the second network adapter if one of a plurality of packets associated with the offloaded connection was received on the second network adapter (see column 8 lines 1-5, 12-14, and 26-39, the NICs are active on the network at the same time and the invention supports a fault tolerance feature; fault tolerance enables a system to continue operating properly in the event of the failure of some of its components. The switch selects one of the multiple NICs using the

fault tolerance feature when one of the NICs fails so that there is no need to reestablish a new connection).

Congdon et al. merely disclose fault tolerance. However, Siu et al. from the same or similar fields of endeavor disclose a method for transferring connections to a different port as a result of one of a plurality of packets associated with the offloaded connection being received on the second network adapter (see column 8 lines 23-44, fault tolerance is incorporated into a switch, wherein when a port fails, the connections are reloaded onto another port).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement a method for transferring connections to a different port as a result of one of a plurality of packets associated with the offloaded connection being received on the second network adapter of Siu et al. into the switch of Congdon et al.

The motivation for implementing a method for transferring connections to a different port as a result of one of a plurality of packets associated with the offloaded connection being received on the second network adapter is that it increases the efficiency of the switch.

Regarding claims 2 and 17, the first and second network adapters are capable of fully offloading all protocol processing (see column 6 lines 34-38);

regarding claims 3 and 18, the first and second network adapters transmit and receive packets of data using a single media access control (MAC) and internet protocol (IP) address (see column 8 lines 1-5);

regarding claim 4, the program reloads an offloaded connection by transferring the context of the connection from the first network adapter to the second network adapter (see column 8 lines 26-39, fault tolerance feature allows the second network adapter to receive the packet assigned to transport via the first network adapter when the first network adapter fails);

regarding claim 7, the first and second network adapters comprise network interface cards (NICs) (see column 6 line 2).

Regarding claims 8, 12, and 16, Congdon et al. disclose a method comprising:

examining a packet received from an external device 9see column 7 lines 38-42);

determining whether a connection associated with the packet is currently offloaded (see column 8 lines 26-39, fault tolerance feature determines whether there is any fail NIC in the server, therefore, determines whether a connection associated with the packet is currently transmitted);

reloading the connection if the packet associated with the connection is offloaded and received by a network interface not currently processing the offloaded connection (see column 8 lines 1-5, 12-14, and 26-39, the NICs are active on the network at the same time and the invention supports a fault tolerance feature; fault tolerance enables a system to continue operating properly in the event of the failure of some of its components. The switch selects one of the multiple NICs using the fault tolerance feature when one of the NICs fails so that there is no need to reestablish a new connection).

Congdon et al. merely disclose fault tolerance. However, Siu et al. from the same or similar fields of endeavor disclose a method for transferring connections to a different port as a result of one of a plurality of packets associated with the offloaded connection being received on the second network adapter (see column 8 lines 23-44, fault tolerance is incorporated into a switch, wherein when a port fails, the connections are reloaded onto another port).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement a method for transferring connections to a different port as a result of one of a plurality of packets associated with the offloaded connection being received on the second network adapter of Siu et al. into the switch of Congdon et al.

The motivation for implementing a method for transferring connections to a different port as a result of one of a plurality of packets associated with the offloaded connection being received on the second network adapter is that it increases the efficiency of the switch.

regarding claims 9 and 13, further comprising determining an identifier for the network interface that receives the packet (see column 7 lines 38-44, the switch determines the output port by looking up the Destination Address in the address table) and writing the determined identifier to a memory (see column 7 address table);

regarding claims 10, 14, and 19, the reloading further comprising copying the context of the connection to the network interface that received the packet (see column 8 lines 26-39, fault tolerance feature allows the second network adapter to receive the

packet assigned to transport via the first network adapter when the first network adapter fails);

regarding claims 11 and 15, the network interface that received the packet and the network interface currently offloading the connection are teamed together (see column 6 lines 13-17, the group of NICs appear as a single NIC to the clients in the network);

regarding claim 20, the program monitors all data received by the first and second means for sending and receiving data connections (see column 7 lines 38-44, the switch determines the output port by looking up the Destination Address in the address table).

7. Claims 5, 6, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Congdon et al. in view of Siu et al. as applied to claims and 1 and 16 above, and further in view of Mahalingham et al. (US 6,314,525).

Regarding claims 5, 6, and 21, Congdon et al. in view of Siu et al. disclose all the subject matter of the claimed invention except the system/method, wherein the program inactivates connections associated with packets that have not been received for a defined time period and send a notification to the program.

However, the invention of Mahalingham et al. from the same or similar fields of endeavor disclose a method/system for deactivating a network adapter when the network adapter fails to respond after a predetermined time period, and notifying the program about the deactivation (see column 9 lines 46-56).

Thus, it would have been obvious to the person of ordinary skill in the art to implement a method/system for deactivating a network adapter when the network adapter fails to respond after a predetermined time period, and notifying the program about the deactivation into the data processing method of Congdon et al.

The motivation for implementing the method/system for deactivating a network adapter when the network adapter fails to respond after a predetermined time period, and notifying the program about the deactivation is that it increases efficiency of the NICs in the server.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pao Sinkantarakorn whose telephone number is 571-270-1424. The examiner can normally be reached on Monday-Thursday 9:00am-3:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PS

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER